CLAIMS

1. Method for providing multimedia broadcast/multicast service in a mobile telecommunication system (1) having at least one serving support node (12; 12A-B), at least one radio network controller (22; 22A-C) and means for radio communication with at least two user equipments (50A-D) subscribing to said multimedia broadcast/multicast service, comprising the step of:

providing multimedia broadcast/multicast data from said at least one serving support node (12; 12A-B) to said at least two user equipments (50A-D),

characterized by the step of:

using a common user plane (107') between a first serving support node (12; 12A) of said at least one serving support node (12; 12A-B) and a first radio network controller (22; 22A) of said at least one radio network controller (22; 22A-C) for multimedia broadcast/multicast data to at least a first user equipment and a second user equipment of said at least two user equipments (50A-D).

2. Method according to claim 1, **characterized in that** all said at least two user equipments (50A-D) within a service area use said common user plane (107').

3. Method according to claim 1 or 2, **characterized in that** said first user equipment (50A-B) has said first radio network controller (22A) as serving radio network controller and said second user equipment (50C-D) has a second radio network controller (22B-C) as serving radio network controller, whereby a communication path of a control plane (105) of at least one of said first and second user equipment is separated from a communication path of said first user plane (107').

4. Method according to claim 3, **characterized in that** a communication path of said control plane (105) of said second user equipment (50C-D) is separated from said communication path of said first user plane (107').

5. Method according to claim 3 or 4, **characterized by** the further step of communicating MBMS information of said second user equipment (50C-D) from said second radio network controller (22B-C) to said first radio network controller (22A).

6. Method according to claim 5, **characterized in that** said MBMS information of said second user equipment (50C-D) comprises an attach request.

7. Method according to claim 5 or 6, **characterized by** the further step of determining, in said first radio network controller (22A), whether use of common resources for MBMS data is favorable, based on said MBMS information communicated from said second radio network controller (22B-C).

8. Method according to claim 5, 6 or 7, **characterized by** the further step of communicating information associated with MBMS from said first radio network controller (22A) to said second radio network controller (22B-C).

9. Method according to claim 8, **characterized in that** said information associated with MBMS communicated from said first radio network controller (22A) to said second radio network controller (22B-C) comprises an attach response.

10. Method according to claim 8, **characterized in that** said information associated with MBMS communicated from said first radio network controller (22A) to said second radio network controller (22B-C) comprises an indication of transferring between a mode using said common user plane (107') and a mode using dedicated user planes (107).

11. Method according to claim 8, **characterized in that** said information associated with MBMS communicated from said first radio network controller (22A) to said second radio network controller (22B-C) comprises a request to

remove any dedicated user planes to said second radio network controller (22B-C) for said at least one user equipment.

12. Controlling radio network controller (22; 22A-B) in a mobile telecommunication system (1) having at least one serving support node (12; 12A-B) and means for radio communication with at least two user equipments (50A-D) subscribing to a multimedia broadcast/multicast service, comprising:

means for providing multimedia broadcast/multicast data from said at least one serving support node (12; 12A-B) to said at least two user equipments (50A-D),

characterized by:

means for using a common user plane (107') between a first serving support node (12; 12A) of said at least one serving support node (12; 12A-B) and a first radio network controller (22; 22A) of said at least one radio network controller (22; 22A-C) for multimedia broadcast/multicast data to at least a first user equipment and a second user equipment of said at least two user equipments (50A-D).

13. Controlling radio network controller according to claim 12, **characterized in that** said means for using a common user plane (107') is arranged to handle communication to all said at least two user equipments (50A-D) within a service area.

14. Controlling radio network controller according to claim 12 or 13, **characterized by** interface to a second radio network controller (22B-C) serving as serving radio network controller of said second user equipment (50C-D), and means for separating a communication path of a control plane (105) of at least one of said first and second user equipment (50A-D) from a communication path of said first user plane (107').

15. Controlling radio network controller according to claim 14, **characterized in that** said means for separating is arranged to separate said

communication path of said control plane (105) of said second user equipment (50C-D) from said communication path of said first user plane (107').

16. Controlling radio network controller according to claim 14 or 13, **characterized in that** said interface is arranged to communicate MBMS information of said second user equipment (50C-D) from said second radio network controller (22B-C) to said first radio network controller (22A).

17. Controlling radio network controller according to claim 16, **characterized by** further comprising means for determining whether use of common resources for MBMS data is favorable, based on said MBMS information communicated from said second radio network controller (22B-C).

18. Controlling radio network controller according to claim 16 or 17, **characterized in that** said interface is further arranged to communicate information associated with MBMS from said first radio network controller (22A) to said second radio network controller (22B-C).

19. Serving radio network controller (22; 22A-C) in a mobile telecommunication system (1) having at least one serving support node (12; 12A-B), at least one further radio network controller (22; 22A-C) and means for radio communication with at least two user equipments (50A-D) subscribing to a multimedia broadcast/multicast service, said serving radio network controller comprising:

means for providing multimedia broadcast/multicast service control signaling (105) to a first of said at least two user equipments (50A-D),

interface to a first (22A) of said at least one further radio network controller (22; 22A-C) serving as controlling radio network controller of said at least two user equipments (50A-D),

characterized in that

said interface is arranged to communicate MBMS information of said first said at least two user equipments (50A-D) from said serving radio

network controller (22; 22A-C) to said first (22A) of said at least one further radio network controller (22; 22A-C).

20. Serving radio network controller according to claim 19, **characterized in that** said interface is further arranged to communicate information associated with MBMS from said first (22A) of said at least one further radio network controller (22; 22A-C) to said serving radio network controller (22; 22A-C).

21. Serving radio network controller according to claim 20, **characterized by** further comprising means for removing a user plane for multimedia broadcast/multicast data to said first of said at least two user equipments (50A-D) in response to said information associated with MBMS requesting such removing.
